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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,568	02/15/2002	Nicholas P. Wilt	215514	3290

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EXAMINER

PAPPAS, PETER

ART UNIT	PAPER NUMBER
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2671

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/077,568	Applicant(s) WILT ET AL.	
	Examiner Peter-Anthony Pappas	Art Unit 2671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 11-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engstrom et al. (U.S. Patent No. 5, 801, 717).
3. In regards to claim 11 Engstrom et al. teaches a display device interface and methods for managing surface memory, through the use of surface structures. Surface structures can be implemented through the use of surface objects. A display device interface can be represented by a display device object, which creates and maintains additional objects such as surface objects, for the display device. To create a surface object a function is called in which a new surface object is created that is representative of a surface and the underlying surface memory that holds said surface. Flipping structures can be created in this manner and each represent a front buffer, and one or more back buffers (column 4, lines 26-67; column 18, lines 27-36). The front buffer typically holds a completed pixmap that is ready for use through the display device interface (column 14, lines 13-15). Surface structures can also include overlays, which consist of the compositing of a plurality of image layers (column 12, lines 62-67; column 13, lines 1-14). The collection of surface objects, be it one or more, under the control of the display device object is considered the presentation surface set. It is noted that the

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primary presentation surface, presentation back buffer, overlay primary surface and overlay back buffer are all considered to be and/or include buffers for the storage of information. Additionally, a primary presentation surface and overlay primary surface are considered front buffers, while presentation back buffer and overlay back buffer are considered back buffers.

Engstrom et al. additionally teaches the relationship between application programs ("applications") 52, a display device interface 50 (with an optional hardware emulation layer 58), a hardware abstraction layer (HAL) 54, and a display hardware 56, which includes hardware responsible for the display of 2D and 3D rendered graphics and animation, video, text and still images (column 6, lines 41-67; column 7, lines 1-4; Fig. 2). Elements 50, 58 and 54 are considered the display interface driver. Engstrom et al., however, fails to explicitly teach the use of said display device interface for the merging of display information received from the primary presentation surface and the overlay primary surface.

It would have been well known and obvious to one skilled in the art, at the time of the applicant's invention, to use said display interface and HAL as the receiving element for display information, i.e. from a front buffer in which display information is stored, before said display information could be presented via display hardware, because it is conventional that display hardware requires a means (i.e. display device interface and HAL) by which to interface with a computer system, in which the display hardware is respectively housed.

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4. In regards to claim 12 Engstrom et al. teaches that the HAL can be a part of the display hardware 56 or can be implemented in software (column 6, lines 53-58).

Engstrom et al., however, fails to explicitly teach that the display interface driver comprises firmware executable components.

It would have been well known and obvious to one skilled in the art, at the time of the applicant's invention, that a display interface driver would include a firmware executable, because by doing so would allow for the display interface driver and any connected hardware, to be accessed through said display interfaced drive, to be utilized via any standard interface means and thus not require any additional modifications to be made so to allow for the use of said display interface drive and/or connected hardware.

5. In regards to claim 13 Engstrom et al. teaches the display device object can also create, in addition to a surface object, a palette object and a clipper object. A surface object can include a pixmap, an alpha buffer or a Z buffer (column 17, lines 33-42).

Each alpha value, in said alpha buffer, describes the degree to which a corresponding pixel (per-pixel) is transparent (column 12, lines 55-61). A palette object represents a color table (color-key) and can be attached to pixmap surfaces such as an overlay (column 17, lines 43-52; column 18, lines 1-12).

6. In regards to claim 14 Engstrom et al. teaches front and back buffers are linked to one another via an attachment link (column 14, lines 36-38; Fig 1, element 162).

Additionally, pointers controlled by the display interface are used to swap data between front and back buffers (column 14, lines 39-56).

7. In regards to claim 15 Engstrom et al. teaches a computer system 20, which includes a CPU 28, memory system 30 and bus structure 32. Memory system 30 comprises of main memory 38 and secondary storage 40, wherein main memory includes RAM and ROM and secondary storage includes computer-readable medium such as floppy disks, hard drives, etc. (column 5, lines 38-64; column 6, lines 29-39). It is noted that said main memory and secondary storage are considered to provide the means by which computer program instructions can and are stored. Additionally, the rationale disclosed in the rejection of claim 11 is incorporated herein.

8. In regards to claim 16 the rationale disclosed in the rejection of claim 15 is incorporated herein. In addition, the system of claim 15 is considered to be performing the method as claimed.

9. In regards to claim 17 the rationale disclosed in the rejection of claim 13 is incorporated herein.

10. In regards to claim 18 the rationale disclosed in the rejection of claim 16 is incorporated herein. In addition, the system of claim 15 is considered to be performing the method as claimed.

### ***Response to Arguments***

11. The prior double patenting rejection has been withdrawn after further consideration by the Office and not based upon Applicant's arguments.

12. In response to Applicant's argument that Engstrom et al. fails to disclose a second flipping chain it is noted that Engstrom et al. teaches that various data can be stored in a given flipping structure. In one situation said data can comprise overlay

information (column 12, lines 62-67; column 13, lines 1-14). It is noted that a flipping structure comprising overlay information is considered said overlay flipping chain. It is further noted that the respective claim language does not limit said chains to having to exist simultaneously.

13. In response to Applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., putting overlay surfaces into a second flipping chain used in parallel with a primary flipping chain) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

14. Applicant's arguments have been fully considered but are not deemed persuasive.

### ***Conclusion***

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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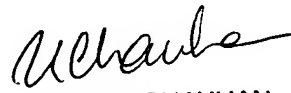
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter-Anthony Pappas whose telephone number is 571-272-7646. The examiner can normally be reached on M-F 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on 571-272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PAP

  
ULKA J. CHAUHAN  
PRIMARY EXAMINER